

Remarks

The above Amendments and these Remarks are in reply to the Office Action, Paper No. 8, mailed February 13, 2003.

Claims 1-14 were pending in the Application prior to the outstanding Office Action. The present Response cancels without prejudice claim 11; replaces claims 4, 5, 10, 12, and 13; and adds new claims 15-24, leaving for the Examiner's present consideration claims 1-10, and 12-24. Reconsideration of the claims as amended is respectfully requested. Applicant reserves the right to prosecute any originally presented or cancelled claims in a continuing or future application.

I. Summary of Examiners Rejections

In the Office Action, the drawings were objected to by the draftsperson's patent drawings review. The Examiner also objected to claim 4 as being in improper form under 37 C.F.R. 1.75. The Examiner rejected claim 12 under 35 U.S.C. 112 for insufficient antecedent basis. The Examiner also rejected claims 1-4, 7-9, and 12-14 under 35 U.S.C. 103(a) as being obvious over Spruiell et al. (U.S. Pat 6,356,796) in view of Barford et al. (U.S. Pat 5,946,482). The Examiner rejected claims 5, 6, and 10-11 under 35 U.S.C. 102(e) as being anticipated by Spruiell et al. (U.S. Pat 6,356,796).

II. Summary of Applicants' Amendment

The present Response cancels without prejudice claim 11; replaces claims 4, 5, 10, 12, and 13; and adds new claims 15-24, leaving for the Examiner's present consideration claims 1-10, and 12-24. Reconsideration of the claims is respectfully requested.

III. Statement concerning Common Ownership

The present Application 09/589,966 and Patent No. 6,356,796 were, at the time the invention of Application 09/589,966 was made, commonly owned by, or subject to an obligation of assignment to Antrim Design Systems, Inc.

IV. Drawings

The drawings had been objected to by the draftsman's patent drawings review. Submitted herewith is a replacement set of drawings. Applicant respectfully requests that the replacement drawings be included in the Application and considered therewith.

V. Claim Objection under 37 C.F.R. 1.75.

Claim 4 was objected to as being in improper form under 37 C.F.R. 1.75. Claim 4 has been amended by the present response to be in proper form, and to depend solely from Claim 1. New Claims 15 and 16 have been added depending from Claim 2 and from Claim 3 respectively. According, Applicant respectfully submits that Claim 4 is now in proper format and reconsideration thereof is respectfully requested.

VI. Claim Rejection under 35 U.S.C. § 112, second paragraph

Claim 12 had been rejected under 35 U.S.C. 112 for insufficient antecedent basis. Claim 12 has been amended by the present response to depend from Claim 10 which provides the required antecedent basis. According, Applicant respectfully submits that Claim 12 now complies with 35 U.S.C. § 112, and reconsideration thereof is respectfully requested.

VII. Claims rejected under 35 U.S.C. § 103(a)

In the Office Action of February 13, 2003, claims 1-4, 7-9, and 12-14 were rejected under 35 U.S.C. 103(a) as being obvious over Spruiell et al. (U.S. Pat 6,356,796) in view of Barford et al. (U.S. Pat 5,946,482).

Applicants submit herewith (see section III above) a Statement concerning Common Ownership, stating that the present Application 09/589,966 and Patent No. 6,356,796 were, at the time the invention of Application 09/589,966 was made, commonly owned by Antrim Design Systems, Inc., or were subject to an obligation of assignment to Antrim Design Systems, Inc.

As such, Applicant requests that the Spruiell et al. reference (U.S. Pat 6,356,796) be disqualified as prior art under 35 U.S.C. 103(c).

Applicant respectfully submits that disqualification of the Spruiell et al. reference under 35 U.S.C. 103(c) renders moot the rejection under 35 U.S.C. 103(a). Applicant also respectfully submits that claims 1-4, 7-9 are now allowable over the cited references, and reconsideration thereof is requested.

VIII. Claims rejected under 35 U.S.C. § 102(e)

In the Office Action of February 13, 2003, claims 5, 6, and 10-11 were rejected under 35 U.S.C. 102(e) as being anticipated by Spruiell et al. (U.S. Pat 6,356,796).

Claim 5

Claim 5 has been amended by the present Response to read:

5. (Currently Amended) A method of mixed signal circuit simulation, comprising the steps of:
- creating one or more plans for use in circuit synthesis, each plan being created by
 - determining a circuit comprising at least one set of circuit elements,
 - identifying a set of parameters for construction of said circuit elements,
 - simulating operation of said circuit at a set of points, each point defined by
 - varying at least one of said parameters,
 - consolidating results from the simulation operation, and,
 - storing the consolidated results of said simulation in a behavioral model of
 - said plan;
 - selecting a plan for a circuit to be designed;
 - providing the selected plan and a set of performance requirements to a synthesis engine;
 - executing the plan; and
 - retrieving results of the executed plan.

Claim 5, as amended, defines an embodiment in which the plan used for synthesis be created by determining a circuit comprising at least one set of circuit elements, identifying a set of parameters for construction of said circuit elements, simulating operation of said circuit at a set of points, each point defined by varying at least one of said parameters, consolidating results from the simulation operation, and, storing the consolidated results of said simulation in a behavioral model of said plan. Applicant respectfully submits that Spruiell et al. does not teach these features. As such, Applicant respectfully submits that Claim 5 is allowable over the cited references, and reconsideration thereof is respectfully requested.

Claim 6

Claim 6 depends from, and includes all of the limitations and features of Claim 5. In view of the amendments to Claim 5 and the remarks presented above, Applicant respectfully submits that

Claim 6 is now allowable over the cited references, and reconsideration thereof is respectfully requested.

Claim 10

Claim 10 has been amended by the present Response to read:

10. (Currently Amended) An mixed signal synthesizer, comprising:
a synthesis engine configured to determine an optimized circuit and produce a sized netlist based on a plan having a circuit design and parameters for optimizing the circuit[.]
a synthesis plan library having a set of synthesis plans for at least one circuit, each synthesis plan having a circuit design and a set of parameterized values regarding any of physical characteristics and values of circuit elements, said synthesis plan being created by
determining a circuit comprising at least one set of circuit elements,
identifying a set of parameters for construction of said circuit elements,
simulating operation of said circuit at a set of points, each point defined by
varying at least one of said parameters,
consolidating results from the simulation operation, and,
storing the consolidated results of said simulation in a behavioral model of
said plan; and,
a user interface configured to allow a user to select a synthesis plan from the library and input the plan and a set of at least one performance characteristic to said synthesis engine.

Claim 10, as amended, defines an embodiment in which the plan used for synthesis is created by determining a circuit comprising at least one set of circuit elements, identifying a set of parameters for construction of said circuit elements, simulating operation of said circuit at a set of points, each point defined by varying at least one of said parameters, consolidating results from the simulation operation, and, storing the consolidated results of said simulation in a behavioral model of said plan. Applicant respectfully submits that Spruiell et al. does not teach these features. As such, Applicant respectfully submits that Claim 10 is allowable over the cited references, and reconsideration thereof is respectfully requested.

Claim 11

Claim 11 has been canceled, rendering moot the rejection of this claim.

IX. Additional Amendments

Claims 15-24 have been newly added by the present Response. Applicant respectfully requests that the additional claims be entered in the Application and considered therewith.

X. Conclusion

In light of the above, it is respectfully submitted that all of the claims now pending in the subject patent application should be allowable, and a Notice of Allowance is requested. The Examiner is respectfully requested to telephone the undersigned before an advisory action is issued in order to avoid any unnecessary filing of an appeal.

A Petition for Extension of Time is enclosed herewith, together with the appropriate fee, to extend the time within which to respond until July 13, 2003.

The Commissioner is authorized to charge any underpayment or credit any overpayment to Deposit Account No. 06-1325 for any matter in connection with this response, including any fee for extension of time, which may be required.

Respectfully submitted,

Date: July 11, 2003

By: 

Karl Kenna
Reg. No. 45,445

FLIESLER DUBB MEYER & LOVEJOY LLP
Four Embarcadero Center, Fourth Floor
San Francisco, California 94111-4156
Telephone: (415) 362-3800